

# UNEXMIN

AN AUTONOMOUS UNDERWATER EXPLORER FOR FLOODED MINES

## UNEXMIN INVENTORY OF FLOODED MINES

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NEMO 33, UNEXMIN FINAL CONFERENCE

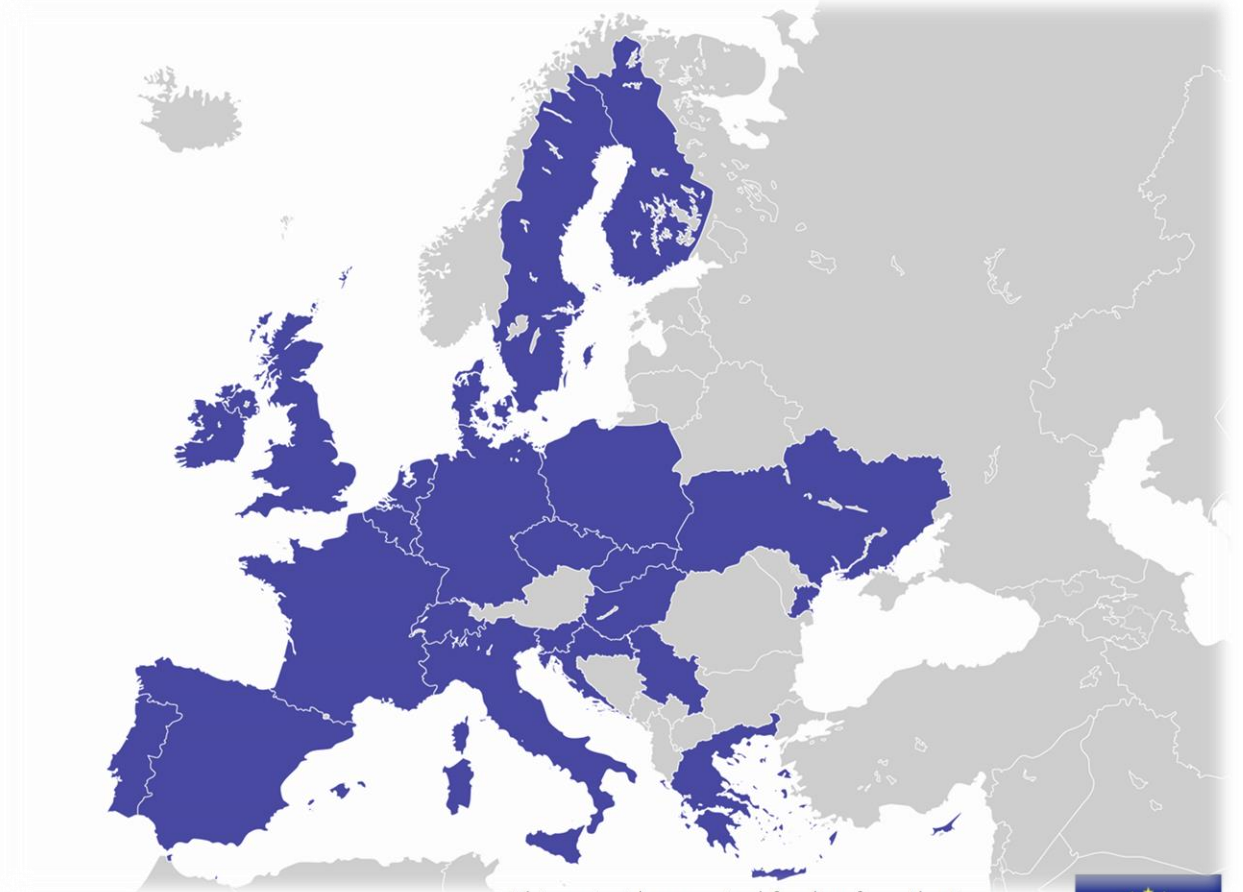
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# DATA COLLECTION

- 24 European Countries
  - 15 EFG National Associations
  - RBINS took data for other countries (UK, Sweden, Germany, Slovakia, Switzerland, Croatia, Denmark, Cyprus)



# INFORMATION REQUESTED IN THE DATABASE

1. Site/mine name
2. Commodities
3. Specific information for UNEXMIN (Access, water level, etc)
4. Geological information (ore, deposit type)
5. Present-day ownership (company, country)
6. General information (Coordinates, activity status, legal restrictions, etc)
7. Additional notes



# EXTENSION OF DATABASE

The Linked Third Parties have collected information in their own countries.

The Geological Survey of Belgium did the same along 8 European countries.

**TOTAL OF ENTRIES | 11678**

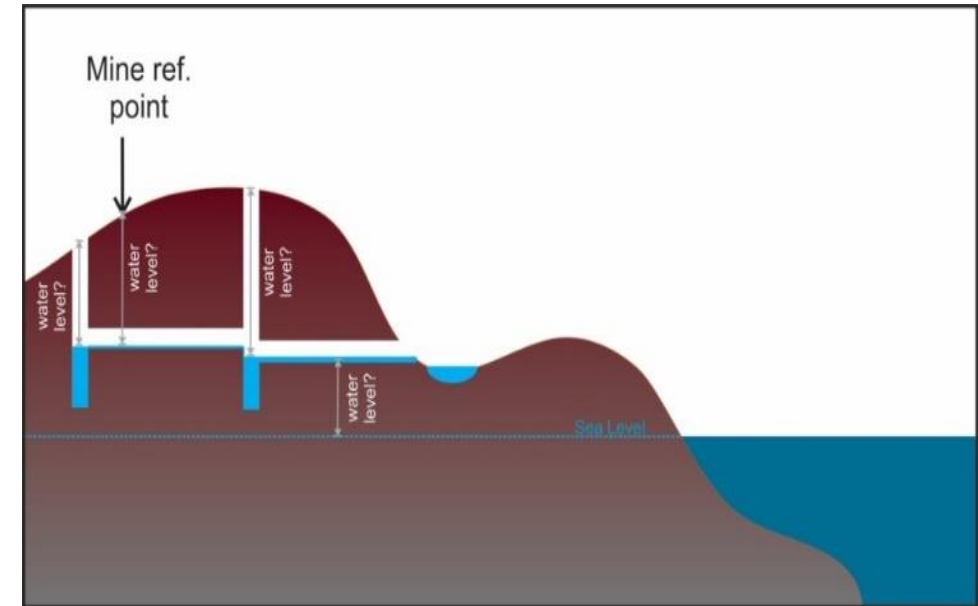
#	Country	Collected by/LTP	Number of entries
1	Belgium	Belgo-Luxembourg Union of Geologists (BLUG)	31
2	Croatia	Geological Survey of Belgium (GSB)	5
3	Cyprus	Geological Survey of Belgium (GSB)	7
4	Czech Republic	Czech Association of Economic Geologists (CAEG)	10
5	Denmark	Geological Survey of Belgium (GSB)	0
6	Finland	The Finnish Union of Environmental Professionals (LOIMU)	75
7	France	European Federation of Geologists (EFG)	3468
8	Germany	Geological Survey of Belgium (GSB)	240
9	Greece	Association of Greek Geologists (AGG)	11
10	Hungary	Hungarian Geological Society (HGS)	18
11	Ireland	Institute of Geologists of Ireland (IGI)	11
12	Italy	Italian National Council of Geologists (CNG)	1183
13	Luxembourg	Belgo-Luxembourg Union of Geologists (BLUG)	2
14	The Netherlands	Royal Geological and Mining Society of the Netherlands (KNGMG)	1
15	Poland	Polish Association of Minerals Asset Valuers (PAMAV)	17
16	Portugal	Portuguese Association of Geologists (APG)	195
17	Serbia	Serbian Geological Society (SGS)	14
18	Slovakia	Geological Survey of Belgium (GSB)	67
19	Slovenia	Slovenian Geological Society (SGS)	96
20	Spain	Official Spanish Association of Professional Geologists (ICOG)	165
21	Sweden	Geological Survey of Belgium (GSB)	213
22	Switzerland	Geological Survey of Belgium (GSB)	2
23	Ukraine	Ukrainian Association of Geologists (UAG)	5
24	United Kingdom	Geological Survey of Belgium (GSB)	5843
	<b>TOTAL</b>		<b>11678</b>

# MANAGING THE DATA: WATER TABLE

Water level: calculate the distance between the mine and the nearest river point. Extrapolate through a DEM processing.



The estimated water level inside the mine corresponds to the altitude of the nearest river point.



# MANAGING THE DATA: GEOLOGY

- Ore groups classification in 8 main categories: magmatic, metasomatic, hydrothermal-epigenetic, exhalative-diagenetic, marine-sedimentary, residual and supergene, placers
- Deposit type: (VMS, MVT, SedEx, Porphyry, ...)

1. Site / mine name	4. Geological information		
	Geological information	Ore type	Deposit type
Lipasvaara		Magmatic	Talc-magnesite deposits in ultrabasic rocks
Haapaluoma	Pegmatites: Class Abyssal. Field of discordant lodes (n*km2, n*ha)	Magmatic	Pneumatolytic an pegmatitic deposit
Kaatiala	Pegmatites: Class Abyssal	Magmatic	Pneumatolytic pegmatitic deposit
Kuurmanpohja			

# MANAGING THE DATA: ACCESS & COMMODITIES

- Access to the mine: the distance between the recognized mine location and the nearest road/path.

	Access to the mine
SW00001	Road: path @ >100 m and <= 1000 m
SW00002	Road: path @ >100 m and <= 1000 m
SW00003	Road: unclassified @ >100 m and <= 1000 m
SW00004	Road: tertiary @ >100 m and <= 1000 m
SW00005	Road: tertiary @ >1000 m

1. Site / mine name	2. Commodities			
	Commodity 1	Commodity 2	Commodity 3	Commodity 4
Åkulla Östra	COPPER	GOLD	SILVER	NA
Åkulla Västra	COPPER	GOLD	SILVER	NA
Allmäningsbofältet	IRON	IRON	NA	NA
Åsen	COPPER	ZINC	SILVER	GOLD
Asköfältet	IRON	NA	NA	NA

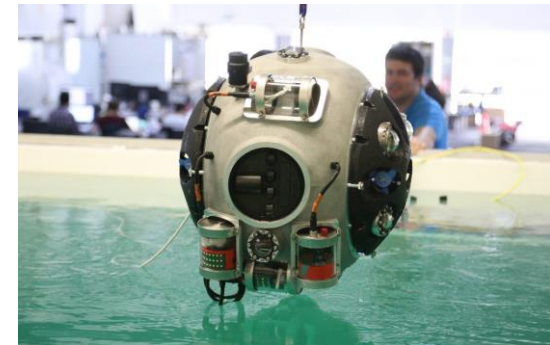
- Commodities: all the commodities have been listed according to the INSPIRE codelist.

# INVENTORY OF FLOODED MINES

UNEXMIN Map



**Get the inventory for a trial!**



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Many thanks for  
your attention!

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